

INDEX TO VOLUME 33

January-December, 1935

The Metal Industry Publishing Company, New York

ARTICLES ASTERISKED (*) ARE ILLUSTRATED

ARTICLES

A

*100 Years Old, Metal Products Manufacturing Company	135
1600° Service, Plating Cast Iron for	392
Accelerated Tests of Nickel and Chromium Plating on Steel	91
*Advanced Practice in the Rolling of Brass	11
After Treatment of Non-Ferrous Welds	130
Agents for Nickel Solution, Oxidizing	290
Alloy Standards, Die Casting	276
Alloys, Brass Forging	347
Alloys, Nickel and	5
Alloys, Recommended Practice for the Common Aluminum-Copper	388
Alloys, Refining Silver	94
*Aluminum	5
Aluminum Articles, Fabricating Sheet	290
Aluminum Castings, Leaky	208
Aluminum-Copper Alloys, Recommended Practice for the Common	388
Aluminum-Copper Alloys, Recommended Practice for the Common	425
*Aluminum for Screw Machine Work, Free Cutting	277
Aluminum, Melting High Purity	85
Alloys, Recommended Practice for the Common Aluminum-Copper	425
Aluminum, Repairing	201
Aluminum, The Anodic Coating of	168
Aluminum Turnings, Remelting	315
*America, Early Silver Plating in	202
*Annealing, Electric Bright	171
Anodic Coating of Aluminum, The	168
Antimony, Removing	246
Antique Iron on Brass	289
Approved Specifications for Quality of Plated Coatings	251
Articles Made of Silver in Combination with Gold, Marking	439
*Artist, Sheet Metal as Used by an Assaying and Refining, Precious Metals Chemists Talk About	167
*Association Activity, Fostering Cooperation Through Trade	245

B

Barrel, Our Experience in Cadmium Plating in a	430
Bearing Troubles	159
Better Returns from Scrap	316
Binder for Everything to Everything, A	119
Bolts, Hot Galvanizing	424
*Brass, Advanced Practice in the Rolling of	11
Brass, Antique Iron on	289
Brass, Direct Rolling of	162
Brass Forging Alloys	347
Brass Foundry, Faith in the Future of the	436
*Brass Foundry, The	8
*Brass Foundryman's Progress	89
Brass Mixtures, Various Colored	128
Brass Rods, Revised Standards for	94
*Brass Rolling Mill	8
Brass Strong, Making Strong Brass and Making	86, 120, 160, 280
*Brass, The Effect of Some Mill Variables on the Gauge of Sheet	50
*Brazing, Remington Rand Improves Parts, Reduces Costs with Electric-Furnace	353
*Bridgeport, Electroplaters' Society Meeting in	233
*Bridgeport, Electroplaters Will Meet in	193
*Bright Annealing, Electric	171
Bright Dip for Silver	390
Britannia Metal Mixtures	212
Britannia Metal, Treating	273
British Institute of Metals Meeting	122
British Institute of Metals Meeting	348
Bronze, Oxidized	273
Bronze, Pickling Phosphor	351
Bronze Stains	199
Bronze?, What is Phosphor	428
Bushings for High Temperature Cylinders	289

C

Cadmium Plating in a Barrel, Our Experience in	430
--	-----

Calendar of Events of Importance to the Metal Industries

Cans and Pans, Re-Tinning	17
Castings, Leaky Aluminum	10
Castings, Machining Die	208
Cast Iron for 1600° Service, Plating	427
Chemical Equipment, The Fabrication of Silver	392
Chemists Talk About Assaying and Refining, Precious Metals	49
*Chromium Plate on Sewing Machine Parts	167
Chromium Plating on Steel, Accelerated Tests of Nickel and	209
Chromium Wins Patent Suit, United	91
Cleaning and Pickling, Electrolytic	319
Coating of Aluminum, The Anodic	55
Coatings, Approved Specifications for Quality of Plated	168
Coatings, Specifications for Quality of Plated Colored Brass Mixtures, Various	251
Common Aluminum-Copper Alloys, Recommended Practice for the	250
Common Aluminum-Copper Alloys, Recommended Practice for the	128
*Company 100 Years Old, Metal Products Manufacturing	388
Concentrations, A Plater's Guide to Solution Congress and Exposition, National Metal	425
*Congress, The National Metal	135
Convention in Toronto, Foundrymen's	131
*Convention, Master Platers Hold Second Annual	347
*Cooperation Through Trade Association Activity, Fostering	381
*Copper	271
Copper Alloys, Recommended Practice for the Common Aluminum	243
Copper Alloys, Recommended Practice for the Common Aluminum	245
Copper, Discolored	3
*Copper House, New	388
Copper Plates, Direct Production of Electrolytic	425
Copper, Smelting Dirty	273
Copper Tubing	352
Copper, Welding	395
Correction	279
Correction in Platers' Guidebook	85
Crime, A Tale of a	124
*Cutting Tools for Non-Ferrous Metals, Super-High-Speed	164
Cylinders, Bushings for High Temperature	54

D

Dark Nickel	56
Die Casting Alloy Standards	276
Die Castings, Machining	427
Dip for Silver, Bright	390
Direct Production of Electrolytic Copper Plates	395
Direct Rolling of Brass	162
Dirty Copper, Smelting	279
Disc Wheels, Setting Up Steel	170
Discolored Copper	273
*Division Meeting, Institute of Metals	81
Drilling, Glazed Pottery Ware	126
Dropping Tests for Electroplates	133

E

*Early Silver Plating in America	202
*Effects of Some Mill Variables on the Gauge of Sheet Brass	50
*Electric Bright Annealing	171
*Electric-Furnace Brazing, Remington Rand Improves Parts, Reduces Costs with	353
Electrochemical Society Meeting	391
Electrochemists at New Orleans	129
*Electrodeposition Exhibition, The London	437
Electrodeposition of Tin	393
Electrolytic Cleaning and Pickling	55
Electrolytic Copper Plates, Direct Production of	395
*Electroplaters' Institute, Master	200
*Electroplaters' Society Meeting in Bridgeport	233
*Electroplaters Will Meet in Bridgeport	193
Electroplates, Dropping Tests for	133
*Electroplating Generators	434
Electroplating on Steel, Status of Specifications for	357

Equipment Manufacturers Meetings, Foundry	313
Equipment, The Fabrication of Silver Chemical	49
Error	328
Events of Importance to the Metal Industries, A Calendar of	17
Everything to Everything, A Binder for	119
*Exhibition, The London Electrodeposition	437
*Exhibit Opens in New York, Permanent Metal Products	360
Experience in Cadmium Plating in a Barrel, Our	430
Exposition, National Metal Congress and	347

F

*Fabricated Metal Products Display	61
Fabricating Sheet Aluminum Articles	290
Fabrication of Silver Chemical Equipment	49
Faith in the Future of the Brass Foundry	436
*Finishing, Metal Plating and	9
Flux for Zinc	318
*Ford Uses New Rustproofing Process	291
Forging Alloys, Brass	347
*Fostering Cooperation Through Trade Association Activity	245
*Foundry, Brass	8
Foundry Equipment Manufacturers Meeting	313
Foundry, Faith in the Future of the Brass	436
Foundryman's Progress, A Brass	89
Foundrymen's Convention in Toronto	271
*Foundrymen's Meeting in Toronto	309
*Free Cutting Aluminum for Screw Machine Work	277
*Furnace Brazing, Remington Rand Improves Parts, Reduces Costs with Electric	353
Furnace for Zinc, Melting	13
Furnace Linings	56
Furnace for Tube Metal, Melting	59
Future of the Brass Foundry, Faith in	436

G

Galvanizing Bolts, Hot	424
*Gauge of Sheet Brass, The Effect of Some Mill Variables on the	50
*Generators, Electroplating	434
Glazed Pottery Ware, Drilling	126
*Gold and Silver	6
Gold from Old Plating Solutions	128
Gold, Marking Articles Made of Silver in Combination with	439
Gold on Stainless Steel	171
Gold, Present Practice in Refining	208
Gold, Recovery	59
Gold, Silver	205
Guide to Solution Concentrations, A Plater's Guidebook, Correction in Platers'	131
	54

H

*Hall Langdon, Palmer	345
High Purity Aluminum Melting	85
*High Purity Ingot Metal	274
High Temperature Cylinders, Bushings for	289
Hot Galvanizing Bolts	424
*House, New Copper	352
How to Take an Inventory Quickly and Accurately	421

I

*Indicating Pyrometers are Profitable in The Metal Industry	117
*Ingot Metal, High Purity	274
Inserts in Rubber, Molding Metal	325
*Institute, Master Electroplaters'	200
*Institute of Metals Division Meeting	122
Institute of Metals Meeting, British	122
Institute of Metals Meeting, British	348
Inventory Quickly and Accurately, How to Take an	421
Iodide Solutions, Silver from	170
Iron for 1600° Service, Plating Cast	392
Iron on Brass, Antique	289

J

*Japanning Metal Parts	45
*Jewelry Making	9

K

Kid, Reminiscences of a Plater's 57, 206

L

*Langdon, Palmer Hall 345
Layout, Plating Plant 95
*Lead 4
Leaf, Palladium and Palladium 354
Leaky Aluminum Castings 208
Leaky Welds, Sealing 134
Linings, Furnace 56
*London Electrodeposition Exhibition, The 437
Losses from Recovery Rinse Tanks 14
Lubricant, Rolling 361
Lubricant, Wire Drawing 273

M

*Machine Parts, Chromium on Sewing 209
*Machine Work, Free Cutting Aluminum for
Screw 277
Machining Die Castings 427
Making Strong Brass and Making Brass
Strong 86, 120, 160, 280
Manufacturers Meeting, Foundry Equipment 313
*Marine Memorial, Navy and 88
Marking Articles Made of Silver in Com-
bination with Gold 439
*Master Electroplaters' Institute 200
*Master Platers Hold Second Annual Con-
vention 243
Materials Society Meeting, Testing 125
Materials Society Meeting, Testing 247
Meeting, British Institute of Metals 122
Meeting, British Institute of Metals 348
Meeting, Electrochemical Society 391
Meeting, Foundry Equipment Manufacturers 313
*Meeting in Bridgeport, Electroplaters' Society 233
*Meeting in Toronto, Foundrymen's 309
*Meeting, Institute of Metals Division 81
Meeting, Newark Platers Hold Big Annual 164
Meeting, Testing Materials Society 125
Meeting, Testing Materials Society 247
Melting Furnace for Zinc 13
Melting Furnaces for Tube Metal 59
Melting High Purity Aluminum 85
Melting Practice in the Washington Navy
Yard, Non-Ferrous Scrap Metals and 163
*Memorial, Navy and Marine 88
Metal as Used by an Artist, Sheet 439
Metal Congress and Exposition, National 347
*Metal Congress, The National 381
*Metal for Pickling Equipment, Monel 213
*Metal for Protection, Sprayed 60
*Metal, High Purity Ingot 274
Metal Industries, A Calendar of Events of
Importance to the 17
*Metal Industries, The 3
*Metal Industry, Indicating Pyrometers are
Profitable in The 117
Metal Inserts in Rubber, Molding 325
Metal, Melting Furnaces for Tube 59
Metal Mixtures, Britannia 212
*Metal Parts, Japanning 45
*Metal Plating and Finishing 9
*Metal Products Display, Fabricated 61
*Metal Products Exhibit Opens in New York,
Permanent 360
*Metal Products Manufacturing Company 100
Years Old 135
*Metal Products Manufacturing, Stamped, I, 48
Metal Spinning 351
Metal, Treating Britannia 273
Metal Week, National 325
Metals and Melting Practice in the Wash-
ington Navy Yard, Non-Ferrous Scrap 163
Metals Chemists Talk About Assaying and Re-
fining, Precious 167
*Metals Division Meeting, Institute of 81
Metals Meeting, British Institute of 122
Metals Meeting, British Institute of 348
*Metals, Secondary 7
*Metals, Spinning Sheet 155
Metals Stain the Skin, Why 127
*Metals, Super-High-Speed Cutting Tools for
Non-ferrous 314
*Mill, Brass Rolling 8
*Mill Variables on the Gauge of Sheet Brass,
The Effect of Some 50
Mixtures, Britannia Metal 212
Mixtures, Various Colored Brass 128
Molding Metal Inserts in Rubber 325
*Monel Metal for Pickling Equipment 213
Money on Power Bills, Saving 396

N

National Metal Congress and Exposition 347
*National Metal Congress, The 381
National Metal Week 325
*Navy and Marine Memorial 88
Navy Yard, Non-Ferrous Scrap Metals and
Melting Practice in the Washington 163
New Orleans, Electrochemists at 129
New Specifications 347
*New York, Permanent Metal Products Ex-
hibit Opens in 360
Newark Platers Hold Big Annual Meeting 164
Nickel and Chromium Plating on Steel, Ac-
celerated Tests of 91
Nickel and Its Alloys 5
*Nickel and Its Non-Ferrous Applications 52
Nickel, Dark 56
Nickel Silver, Oxidizing 427
Nickel Solutions, Oxidizing Agents for 290
*Non-Ferrous Applications, Nickel and Its 52

*Non-Ferrous Metals, Super-High-Speed Cut-
ting Tools for 314
Non-Ferrous Scrap Metals and Melting Prac-
tice in the Washington Navy Yard 163
Non-Ferrous Welds, After Treatment of 130

O

Old Plating Solutions, Gold from 128
Our Experience in Cadmium Plating in a
Barrel 430
Oxidized Bronze 273
Oxidizing Agents for Nickel Solutions 290
Oxidizing Nickel Silver 427

P

Palladium and Palladium Leaf 354
Palladium, Rhodium, Plating 7
*Palmer Hall Langdon 345
Pans, Re-Tinning Cans and 10
*Parts, Japanning Metal 45
Patent Suit, United Chromium Wins 319
*Permanent Metal Products Exhibit Opens in
New York 360
Phosphor Bronze, Pickling 351
Phosphor Bronze?, What is 428
Pickling, Electrolytic Cleaning and 55
*Pickling Equipment, Monel Metal for 213
Pickling Phosphor Bronze 351
Plant Layout, Plating 95
*Plate on Sewing Machine Parts, Chromium 209
*Plate Pays, Quality 358
Plated Coatings, Approved Specifications for
Quality of 251
Plated Coatings, Specifications for Quality of 250
*Plated Tableware, Standard Quality for 283
Platers' Guide to Solution Concentrations, A 131
Platers' Guidebook, Correction in 54
Platers Hold Big Annual Meeting, Newark 164
*Platers Hold Second Annual Convention,
Master 243
Plater's Kid, Reminiscences of a 57, 206
*Plating and Finishing Metal 9
Plating Cast Iron for 1600° Service 392
Plating in a Barrel, Our Experience in Cad-
mium 430
*Plating in America, Early Silver 202
Plating Plant Layout 95
Plating Solutions, Gold from Old 128
Plating to Specifications, Silver 165
Platinum, Palladium, Rhodium 7
Pottery Ware, Drilling Glazed 126
Powdered vs. Lump Rosin 2
Power Bills, Saving Money on 396
Practice for the Common Aluminum-Copper
Alloys, Recommended 388
Practice for the Common Aluminum-Copper
Alloys, Recommended 425
Practice in Refining Gold, Present 208
*Practice in the Rolling of Brass, Advanced 11
Precious Metals Chemists Talk About Assay-
ing and Refining 167
Precipitation, Silvering by 429
Present Practice in Refining Gold 208
*Process, Ford Uses New Rustproofing 291
Production of Electrolytic Copper Plates,
Direct 395
*Products Exhibit Opens in New York,
Permanent Metal 360
Progress, A Brass Foundryman's 89
*Protection, Sprayed Metal for 60
*Pyrometers are Profitable in The Metal In-
dustry, Indicating 117

Q

*Quality for Plated Tableware, Standard 283
Quality of Plated Coatings, Approved Spec-
ifications for 251
Quality of Plated Coatings, Specifications for
Quality Plate Pays 358

R

*Rand Improves Parts, Reduces Costs with
Electric-Furnace Brazing, Remington 353
Recommended Practice for the Common
Aluminum-Copper Alloys 425
Recommended Practice for the Common
Aluminum-Copper Alloys 388
Recovering Gold 59
Recovering Silver from Stripping Solution 318
Refining Gold, Present Practice in 208
Refining, Precious Metals Chemists Talk
About Assaying and 167
Refining Silver Alloys 94
Reflectors, Re-Silvering 397
Remelting Aluminum Turnings 315
*Remington Rand Improves Parts, Reduces
Costs with Electric-Furnace Brazing 353
Reminiscences of a Plater's Kid 57, 206
Remover, Rust 282
Removing Antimony 246
Removing Slag 249
Repairing Aluminum 201
Re-Silvering Reflectors 397
Re-Tinning Cans and Pans 10
Returns from Scrap, Better 316
Revised Standards for Brass Rods 94
Rhodium, Platinum, Palladium 7
Rinse Tanks, Losses from Recovery 14
Rods, Revised Standards for Brass 94
Rolling Lubricant 361
*Rolling Mill, Brass 8
*Rolling of Brass, Advanced Practice in the 11
Rolling of Brass, Direct 162
Rosin, Powdered vs. Lump 2
*Rubber Lined Stack, Triflex 170
Rubber, Molding Metal Inserts in 325

Rust Remover 282
*Rustproofing Process, Ford Uses New 291

S

Saving Money on Power Bills 396
Scrap, Better Returns from 316
Scrap Metals and Melting Practice in the
Washington Navy Yard 163
*Screw Machine Work, Free Cutting Alumi-
num for 277
Sealing Leaky Welds 134
*Secondary Metals 7
Setting Up Steel Disc Wheels 170
*Sewing Machine Parts, Chromium Plate on
Sheet Aluminum Articles, Fabricating 209
*Sheet Brass, The Effect of Some Mill Vari-
ables on the Gauge of 50
*Sheet Metal as Used by an Artist 439
*Sheet Metals, Spinning 155
Silver Alloys, Refining 94
Silver, Bright Dip for 390
Silver Chemical Equipment, The Fabrication
of 49
Silver from Iodide Solutions 170
Silver from Stripping Solution, Recovering 318
Silver; Gold 205
*Silver, Gold and 6
Silver in Combination with Gold, Marking
Articles Made of 439
Silver, Oxidizing Nickel 427
*Silver Plating in America, Early 202
Silver Plating to Specifications 165
Silvering by Precipitation 429
Skin, Why Metals Stain the 127
Slag, Removing 249
Smelting Dirty Copper 279
Society Meeting, Electrochemical 391
Society Meeting, Testing Materials 125
Soft Soldering 359
Soldering, Soft 359
Solution Concentrations, A Plater's Guide to 131
Solutions, Gold from Old Plating 128
Solutions, Silver from Iodide 170
Specifications for Electroplating on Steel,
Status of 357
Specifications for Quality of Plated Coatings 250
Specifications for Quality of Plated Coatings,
Approved 251
Specifications, New 347
Specifications, Silver Plating to 165
Spinning, Metal 351
*Spinning Sheet Metals 155
Spinning vs. Stamping 351
*Sprayed Metal for Protection 60
*Stack, Triflex Rubber Lined 170
Stain the Skin, Why Metals 127
Stainless Steel, Gold on 171
Stains, Bronze 199
*Stamped Metal Products Manufacturing, I, 48
Stamping, Spinning vs. 351
*Standard Quality for Plated Tableware 283
Standards, Die Casting Alloy 276
Standards for Brass Rods, Revised 94
Status of Specifications for Electroplating on
Steel 357
Steel, Accelerated Tests of Nickel and Chro-
mium Plating on 91
Steel Disc Wheels, Setting Up 170
Steel, Gold on Stainless 171
Steel, Status of Specifications for Electro-
plating on 357
Stripping Solution, Recovering Silver from
Strong Brass and Making Brass Strong, Mak-
ing 86, 120, 160, 280
*Super-High-Speed Cutting Tools for Non-
Ferrous Metals 314

T

*Tableware, Standard Quality for Plated 283
Tale of a Crime, A 16
Tanks, Losses from Recovery Rinse 14
Tapering Tubes 357
Temperature Cylinders, Bushings for High 289
Testing Materials Society Meeting 125
Testing Materials Society Meeting 247
Tests for Electroplates, Dropping 133
Tests of Nickel and Chromium Plating on
Steel, Accelerated 91
*Tin 4
Tin, Electrodeposition of 355, 393
*Tools for Non-Ferrous Metals, Super-High-
Speed Cutting 314
Toronto, Foundrymen's Convention 271
*Toronto, Foundrymen's Meeting in 309
Treating Britannia Metal 273
Treatment of Non-Ferrous Welds, After 170
*Triflex Rubber Lined Stack 170
Troubles, Bearing 159
Tube Metal, Melting Furnaces for 59
Tubes, Tapering 357
Tubing, Copper 85
Turnings, Remelting Aluminum 315

U

United Chromium Wins Patent Suit 319

V

*Variables on the Gauge of Sheet Brass, The
Effect of Some Mill 50
Various Colored Brass Mixtures 128

W

Washington Navy Yard, Non-Ferrous Scrap
Metals and Melting Practice in the 163
Week, National Metal 325

Welding Copper	124
Welds, After Treatment of Non-Ferrous	130
Welds, Sealing Leaky	134
What is Phosphor Bronze?	428
Wheels, Setting Up Steel Disc	170
Why Metals Stain the Skin	127
Wire Drawing Lubricant	273

Z

*Zinc	3
Zinc, Flux for	318
Zinc, Melting Furnace for	13

AUTHORS**B**

Backus, C. G. Saving Money on Power Bills	396
Blum, Dr. Wm. Accelerated Tests of Nickel and Chromium Plating on Steel	91
Blum, Dr. W. Status of Specifications for Electroplating on Steel	357
Brass Roller. Various Colored Brass Mixtures	128
Brenner, A. Accelerated Tests of Nickel and Chromium Plating on Steel	91

C

Chamberlain, T. H. Bright Dip for Silver	390
Chamberlain, T. H. Plating Cast Iron for 1600° Service	392
Chamberlain, T. H. Re-Silvering Reflectors	397
Chamberlain, T. H. Silvering by Precipitation	429
Colby, S. K. *Aluminum	5
Corson, M. G. Making Strong Brass and Making Brass Strong	86, 120, 160, 280
Corson, M. G. What is Phosphor Bronze?	428

D

Dean, W. A. *Free Cutting Aluminum for Screw Machine Work	277
---	-----

E

E. E. Gold on Stainless Steel	171
Engelhard, Charles. Platinum, Palladium, Rhodium	7
Eyles, A. After Treatment of Non-Ferrous Welds	130

F

F. E. I. Furnace Linings	56
Faint, H. W. A Plater's Guide to Solution Concentrations	131
Fleetwood, C. W. Silver from Iodide Solutions	170
Fletcher, Austin F. Our Experience in Cadmium Plating in a Barrel	430
Fraine, W. Antique Iron on Brass	289
Francis, W. B. Bushings for High Temperature Cylinders	289
Francis, W. B. Fabricating Sheet Aluminum Articles	290
Francis, W. B. Metal Spinning	351
Francis, W. B. Molding Metal Inserts in Rubber	325
Francis, W. B. Soft Soldering	359
Francis, W. B. *Spinning Sheet Metals	155
Francis, W. B. Spinning vs. Stamping	351
Francis, W. B. *Stamped Metal Products Manufacturing	1, 48
Francis, W. B. *Super-High Speed Cutting Tools for Non-Ferrous Metals	314
Francis, W. B. Tapering Tubes	357
Frankel, Samuel. Faith in the Future of the Brass Foundry	436

G

Gerline, Otto. A Brass Foundryman's Progress	89
Graham, Dr. A. K. *Metal Plating and Finishing	9
Graham, Dr. A. Kenneth. Newark Platers Hold Big Annual Meeting	164

H

Hardy, Charles W. How to Take an Inventory Quickly and Accurately	421
Hoke, C. M. *Jewelry Making	9
Hoke, C. M. Why Metals Stain the Skin	127
Hull, R. O. Dropping Tests for Electroplates	133

I

Imhoff, Wallace. Re-Tinning Cans and Pans	10
Imhoff, W. G. Rust Remover	282
Imhoff, W. Hot Galvanizing Bolts	424
Ingalls, W. R. *Zinc	3

J

Jacobs, Fred B. *Chromium Plate on Sewing Machine Parts	209
Jensen, George. Oxidizing Nickel Silver	427
Jewelry Metallurgist. Gold from Old Plating Solutions	128
Jewelry Metallurgist. Present Practice in Refining Gold	208

Jewelry Metallurgist. Recovering Gold	59
Jewelry Metallurgist. Recovering Silver from Stripping Solution	318
Jewelry Metallurgist. Refining Silver Alloys	94

K

Kempf, L. W. *Free Cutting Aluminum for Screw Machine Work	277
Kushner, Joseph B. Losses from Recovery Rinse Tanks	14

L

Leach, Russ M. *The Ballard Process of Copper Plating Printing Rollers	143
Levy, A. Hoyt. Bearing Troubles	159
Lupien, A. J. Plating plant layout	95

M

McCullough, William E. *High Purity Ingot Metal	274
Mantell, C. L. *Tin	4
Master Founder. Britannia Metal Mixtures	212
Master Founder. Leaky Aluminum Castings	208
Master Founder. Removing Antimony	246
Master Founder. Removing Slag	249
Mechanical Engineer. Binder for Everything to Everything	119
Mechanical Engineer. Drilling Glazed Pottery Ware	126
Mechanical Engineer. Repairing Aluminum	201
Mechanical Engineer. Sealing Leaky Welds	134
Mechanical Engineer. Setting Up Steel Disc Wheels	170
Mechanical Engineer. Welding Copper	124
Mesle, F. C. *Standard Quality for Plated Tableware	283
Metallurgist. Bronze Stains	199
Meyer, Walter R. Electrolytic Cleaning and Pickling	55
Miskella, William J. *Japanning Metal Parts	45
Munning, A. P. *Fostering Cooperation Through Trade Association Activity	245

N

Niemeyer, G. H. *Gold and Silver	6
----------------------------------	---

P

Pettis, W. J. Brass Forging Alloys	347
Pettis, W. J. *Brass Rolling Mill	8
Pettis, W. J. Discolored Copper	273
Pettis, W. J. Pickling Phosphor Bronze	351
Pettis, W. J. Rolling Lubricant	361
Pettis, W. J. Wire Drawing Lubricant	273
Plate Maker. Direct Production of Electrolytic Copper Plates	395
Plating Chemist. Silver; Gold	205
Pugh, M. D. Indicating Pyrometers are Profitable in The Metal Industry	117

R

Reardon, W. J. Flux for Zinc	318
Reardon, W. J. Melting Furnace for Zinc	13
Reardon, W. J. Melting Furnaces for Tube Metal	59
Reardon, W. J. Melting High Purity Aluminum	85
Reardon, W. J. Oxidized Bronze	273
Reardon, W. J. Remelting Aluminum Turnings	315
Reardon, W. J. Smelting Dirty Copper	279
Richards, Hedley. A Tale of a Crime	16

S

S. O. J. Powdered vs. Lump Rosin	2
Schneider, William G. *Copper	3
Schwarz, Charles J. *Electroplating Generators	434
Shields, A. L. Electrodeposition of Tin	355
Sizelove, O. J. Dark Nickel	56
Skinner, C. K. *The Effect of Some Mill Variables on the Gauge of Sheet Brass	50
Snow, William G. Early Silver Plating in America	202
Stanley, Robert C. Nickel and Its Alloys	5
Stanley, Robert C. *Nickel and Its Non-Ferrous Applications	52
Strausser, P. W. C. Accelerated Tests of Nickel and Chromium Plating on Steel	91
Strausser, P. W. C. Dropping Tests for Electroplates	133
St. John, H. M. *Brass Foundry	8
St. John, H. M. *National Metal Congress	381
Swartz, Carl E. *Cadmium Nickel as a Bearing Alloy	142

T

Taormina, S. C. Silver Plating to Specifications	165
Thomas, Alan B. Palladium and Palladium Leaf	354
Tillotson, Ralph W. Reminiscences of a Plater's Kid	57
Tour, Sam. *The Mark of Quality on Electroplate	296

V

von Bernewitz, M. W. Non-Ferrous Scrap Metals and Melting Practice in the Washington Navy Yard	163
--	-----

W

Wernicke, Dr. W. *The London Electrodeposition Exhibition	437
Wertheimer, E. G. Better Returns from Scrap	316
Wesley, W. A. Oxidizing Agents for Nickel Solutions	290
Westbrook, F. A. *Sprayed Metal for Protection	60
Wilhelm, Donald. *The Airway Ventilated Buff	404
Wise, M. M. *Quality Plate Pays	358
Wood, W. A. Direct Rolling of Brass	162
Work, Dr. Harold K. The Anodic Coating of Aluminum	168
Wormser, F. E. *Lead	4
Wright, T. A. *Secondary Metals	7

Y

Yntema, L. F. Silver from Iodide Solutions	170
Young, Dr. C. B. F. Silver Plating to Specifications	165

SHOP PROBLEMS**A**

50-50, Copper-Tin	102
Acid in Nickel, Low Boric	402
Acid, Old Chromic	102
Alloy for Heater Couplings	21
Alloy, Plating Zinc Base	22
Alloy, Plating Zinc Base	176
Aluminum, Black on Steel and	365
Aluminum, Copper on	258
Analyses, Nickel	176
Analysis, Brass	294
Analysis, Copper Solution	294
Analysis, Silver	102
Analysis, Silver	295
Analysis, Solution	66
"Antique Silver" Finish	401
Appearance of Chromium and Nickel	65
Auto Reflectors, Silvering	295

B

Barrel Brass Solution	401
Barrel Nickel	365
Barrel Nickel, Stained	140
Base Alloy, Plating Zinc	22
Black, Chemical Jet	258
Black Nickel, Copper, Nickel and	329
Black on Brass	21
Black on Cadmium	101
Black on Hot Dip Zinc	218
Black on Silver	101
Black on Steel and Aluminum	365
Blades, Coloring Steel	366
Blistered Silver	218
Block Tin, Nickel on	219
Bluing Steel	443
Boric Acid in Nickel, Low	402
Brass Analysis	294
Brass and Copper Solutions, Operating	176
Brass, Black on	21
Brass Deposit, Heavy	139
Brass Deposit, Yellow	366
Brass Solution, Barrel	401
Brass Solution, Carbonates in	258
Brass, Stripping Nickel from	219
Bright Finish on Stainless Steel	139
Bright Gold	65
Brittle Nickel Solutions	443
Bronze Bushings	102
Bronze Finish, Dull	65
Bronze Finish, Statuary	176
Buffing Stainless Steel	365
Burnished Gold Finish	22
Burnishing Nickel	102
Bushings, Bronze	102

C

Cadmium, Black on	101
Cadmium on Die Castings	366
Cadmium and Silver Solutions, Nickel	444
Cadmium Solutions, Nickel, Copper and	219
Carbonates in Brass Solution	258
Chemical, Jet Black	258
Chromic Acid, Old	102
Chromium and Nickel, Appearance of	65
Chromium. Streaky	330
Coloring Steel Blades	366
Copper and Cadmium Solutions, Nickel	219
Copper and Silver, Nickel	259
Copper, Cyanide	294
Copper, Cyanide	401
Copper, Deficient	258
Copper Deposit, Heavy	295
Copper, Nickel and	259
Copper, Nickel and Black Nickel	329
Copper on Aluminum	258
Copper on White Metal	175
Copper, Silver on	219
Copper Solution Analysis	294
Copper Solution, Impure	66

Copper Solutions, Operating Brass and	176
Copper, Spongy	66
Copper-Tin 50-50	102
Cost of Plating	102
Couplings, Alloy for Heater	21
Cyanide Copper	294
Cyanide Copper	401

D

Dark Nickel	175
Deficient Copper	258
Deficient Nickel Solution	443
Deficient Silver Solution	259
Deficient Silver Solution	402
Deposit, Heavy Brass	139
Deposit, Heavy Copper	295
Deposit, Obtaining a Rough	66
Deposit, Rustproof	330
Deposit, Silver	366
Deposit, Yellow Brass	366
Dial Finishes, Watch	295
Dials, Etched	295
Die Castings, Satin Finish on	330
Die Castings, Cadmium on	366
Dip, Silver	402
Discolored Gold	329
Dull Bronze Finish	65

E

Electroplating Pipe	366
Etched Dials	295
Etching Resist	444
Etching Stainless Steel	139
Etching Stainless Steel	444

F

Finish, Dull Bronze	65
Finish on Stainless Steel, Bright	139
Finish, Statuary Bronze	176
Finishes, Watch Dial	295
Finishing Metal Ware, Plating and	140

G

General Nickel Solution	259
Gold and Nickel, Strips for	295
Gold, Bright	65
Gold, Discolored	329
Gold Finish, Burnished	22

H

Handles, Joining Knives and	329
Heater Couplings, Alloy for	21
Heating a Nickel Tank	402
Heavy Brass Deposit	139
Heavy Copper Deposit	295
High in Nickel, Solutions Too	444
Hot Dip Zinc, Black on	218
Hydrogen Peroxide	22

I

Impure Copper Solution	66
Ingot, Smooth Top	22

J

Jet Black, Chemical	258
Joining Knives and Handles	329

K

Knives and Handles, Joining	329
-----------------------------	-----

L

Low Boric Acid in Nickel	402
--------------------------	-----

M

Machine Parts, Polishing Screw	140
Metal, Copper on White	175
Metal Ware, Plating and Finishing	140

N

Nickel Analyses	176
Nickel and Black Nickel, Copper	329
Nickel and Copper	259
Nickel and pH too Low	22
Nickel and Silver Troubles	22
Nickel, Appearance of Chromium and	65
Nickel, Barrel	365
Nickel, Burnishing	102
Nickel, Cadmium and Silver Solutions	444
Nickel, Copper and Cadmium Solutions	219
Nickel, Copper and Silver	259
Nickel, Dark	175
Nickel, Low Boric Acid in	219
Nickel on Block Tin	219
Nickel, Pitted and Thin	176
Nickel, Plating Unit, Small	444
Nickel, Replating	402
Nickel, Silver, Oxidizing	330
Nickel Solution, Deficient	443
Nickel Solution, General	259
Nickel Solutions, Brittle	443
Nickel Solutions, Too High in	444
Nickel Solution, Weak	140
Nickel, Stained Barrel	140

Nickel, Strips for Gold and	295
Nickel Tank, Heating A	402
Nickel Throwing Power	444
Non-Metallic, Plating	219

O

Obtaining a Rough Deposit	66
Old Chromic Acid	102
Operating Brass and Copper Solutions	176
Oxidizing Nickel Silver	330

P

Peroxide Hydrogen	22
pH too Low, Nickel and	22
Pipe, Electroplating	366
Pitted and Thin Nickel	176
Plating and Finishing Metal Ware	140
Plating, Cost of	102
Plating Non-Metallics	219
Plating Unit, Small Nickel	444
Plating Zinc Base Alloy	22
Plating Zinc Base Alloy	176
Polishing Screw Machine Parts	140
Power, Nickel Throwing	444
Prevention, Rust	66

R

Recovering Silver	402
Reflectors, Silvering Auto	295
Removing Soft Solder	259
Replating Nickel	402
Resist, Etching	444
Rheostat Switches	330
Rough Deposit, Obtaining a	66
Rust Prevention	66
Rust Proof Deposit	330

S

Sample, Send A	102
Satin Finish on Die Casting	330
Screw Machine Parts, Polishing	140
Season Cracks	22
Send a Sample	102
Silver Analysis	102
Silver Analysis	295
Silver Solutions, Nickel, Cadmium and	444
Silver and Silver Strike	176
Silver, Black on	101
Silver, Blistered	218
Silver Deposit	366
Silver, Dip	402
"Silver" Finish, "Antique"	401
Silver, Nickel Copper and	259
Silver on Copper	219
Silver on Stainless Steel	366
Silver on Vases	102
Silver, Oxidizing Nickel	330
Silver, Recovering	402
Silver Solution	295
Silver Solution, Deficient	259
Silver Solution, Deficient	402
Silver Solution, Weak	402
Silver, Stripping	140
Silver, Stripping	219
Silver Troubles, Nickel and	22
Silvering Auto Reflectors	295
Small Nickel Plating Unit	444
Smooth Top Ingot	22
Soft Solder, Removing	259
Solder, Removing Soft	259
Solution Analysis	66
Solution, Deficient Nickel	443
Solution, Weak Nickel	140
Solutions, Brittle Nickel	443
Solutions, Nickel, Cadmium, Silver and	444
Bronze	219
Solutions, Nickel, Copper and Cadmium	176
Solutions, Operating Brass and Copper	444
Solutions Too High in Nickel	66
Spongy Copper	140
Stained Barrel Nickel	139
Stainless Steel, Bright Finish on	365
Stainless Steel, Buffing	139
Stainless Steel, Etching	444
Stainless Steel, Silver on	366
Statuary Bronze Finish	176
Steel and Aluminum, Black on	365
Steel Blades, Coloring	366
Steel, Bluing	443
Steel, Bright Finish on Stainless	365
Steel, Buffing Stainless	139
Steel, Etching Stainless	444
Steel, Etching Stainless	366
Steel, Silver on	330
Streaky Chromium	176
Strike, Silver and Silver	219
Stripping Nickel from Brass	140
Stripping Silver	219
Stripping Silver	295
Strips for Gold and Nickel	330
Switches, Rheostat	402

T

Tank, Heating a Nickel	402
Thin Nickel, Pitted and	176
Throwing Power, Nickel	444
Tin, 50-50, Copper	102
Tin, Nickel on Block	219

U

Unit, Small Nickel Plating	444
----------------------------	-----

V

Vases, Silver on	102
------------------	-----

W

Watch Dial Finishes	295
Weak Nickel Solution	140
Weak Silver Solution	402
White Metal, Copper on	175

Y

Yellow Brass Deposit	366
----------------------	-----

Z

Zinc Base Alloy, Plating	22
Zinc Base Alloy, Plating	176
Zinc, Black on Hot Dip	218

EQUIPMENT**A**

Abrasive Cutter, Wet	181
Abrasive Grains, New	24
*Acid Ejector	333
Acid Proof Cements	261
*Airway Ventilated Buff, The	404
Alkali, New Industrial	104
Alkali, New Industrial	145
Alloy, Brass Die Casting	370
*Alloy, Cadmium-Nickel as a Bearing	142
Alloy, Dowmetal "H"—a Magnesium Sand	446
Casting	260
Alloy, New Non-Ferrous	178
Alloy, Sodium Zinc	369
Alternating Current, Pickling Process Uses	144
Aluminum Solder, New	261
*Analytical Set	26
*Anode Patented, Ball	407
*Anodes for Copper, Brass and Zinc, Ball	178
Anodes, Zam	333
*Applicator, Buffing Composition	447
*Arm Spray Coating Machine, Swinging	223
*Atmosphere Furnaces, Continuous Controlled	448
*Atomizer for Burns	407
Automatic Control on Detroit Rocking Furn-	406
aces, New	
*Automobile Fender Polishing Lathes	
*Autosan Metal Parts Washing Machine, Colt	

B

*Bags for Plating Solutions, Filter	332
*Balance New Laboratory	333
Baling Press, Scrap Metal	180
*Ball Anode Patented	26
*Ball Anodes for Copper, Brass and Zinc	407
Ball Bearing Buffers	222
*Ballard Process of Copper Plating Printing	143
Rollers	298
*Barrel, Mercil Type Burnishing	405
Barrel, New Burnishing	103
*Barrel, The Udylite Plating	179
*Barrel, Triple Action Cutting	142
*Bearing Alloy, Cadmium Nickel as a	222
Bearing Buffers, Ball	180
*Bench Grinder	103
*Black Finish, New	68
*Blast Cleaning Machine, Centrifugal	27
*Blast Mill, New	407
*Brass and Zinc, Ball Anodes for Copper	370
Brass Die Casting Alloy	178
Brazing Flux, New	25
Bright Nickel Process, New	404
*Buff, Airway Ventilated	222
Buffers, Ball Bearing	144
Buffers, Line of Grinders and	333
*Buffing Composition Applicator	297
*Buffing Lathe, Standard Extra Wide Swing	406
Polishing and	298
*Buffs, New Line of Humidified	405
*Burnishing Barrel, Mercil Type	223
Burnishing Barrel, New	
*Burns, Atomizer for	

C

*Cabinets, Sand Blast	26
*Cadmium Deposits, Thickness Tester for Zinc	221
and	142
*Cadmium-Nickel as a Bearing Alloy	446
Casting Alloy, Dowmetal "H"—a Magnesium	221
Sand	67
Castings, Hard Non-Corrosive	261
Cement, High Temperature Fire	68
Cements, Acid Proof	67
*Centrifugal Blast Cleaning Machine	449
*Centrifugal Pump, New Type	408
Chemicals for Jewelry Manufacture	334
*Chipping Goggles, New	405
Chromium Plating, Improved Stop-Off Lac-	261
quer for	68
Cleaner, New Metallsilicate	447
Cleaners, MacDermid	179
*Cleaning Machine, Centrifugal Blast	334
*Coating Machine, Swinging Arm Spray	408
Coating, New	334
*Coating, Plating Rack	408
Coatings, Metallic	404
Coatings of Impervious Films	406
Color Match, New Finish to Give	333
*Colt Autosan Metal Parts Washing Machine	
*Composition Applicator, Buffing	

Compound, Fast Cutting	222
*Concrete, Improved Insulating Refractory ..	407
*Conditioner, Sand	28
*Continuous Controlled Atmosphere Furnaces ..	24
*Continuous Washer	26
Control on Detroit Rocking Furnaces, New Automatic ..	448
*Control-Pyrometer, Improved Drive for ..	332
Control Units	178
*Copper, Brass and Zinc, Ball Anodes for ..	407
Copper, Non-Crystalline	144
*Copper Plating Printing Rollers, The Ballard Process of ..	143
Core Plates and Pallets	368
*Corrosives, Pump for	448
Covering, Kote-Rax	298
Cromodizing a New Rustproofing Process ..	408
Current, Pickling Process Uses Alternating ..	369
Cutter, Wet Abrasive	181
*Cutting Barrel, Triple Action	179
Cutting Compound, Fast	222

D

Design Service	145
Detroit Rocking Furnaces, New Automatic Control on ..	448
Developments in Rubberizing, New ..	297
Die Casting Alloy, Brass	370
*Die Casting Machine, Hydraulic High Speed ..	223
*Die Casting Machine, New	24
*Die Casting Machines	144
Dowmetal "H"—a Magnesium Sand Casting Alloy ..	446
*Drive for Control-Pyrometer, Improved ..	332
*Drive, New Roll Grinder	180
Dry Type Filter	261
*Drying for Plated Parts, Fast	298

E

*Edgewise Pyrometer, Horizontal	260
*Ejector, Acid	333
*Electric Furnace Cuts Heat Treating Cost 50% ..	68
Electrodeposition of Tungsten with Related Elements ..	447
*Electroplate, The Mark of Quality on ..	296
*Electroplaters' Microscope	368
Equipment, Foundry	25
*Equipment, New X-Ray	370
Etching Methods	260
*Exhibit in Paris, Magnus	297
Exhibit, Korolac	334
Exhibit Opens September 1, Metal Products ..	298

F

Fast Cutting Compound	222
*Fast Drying for Plated Parts	298
*Fender Polishing Lathes, Automobile	407
Films, Coatings of Impervious	408
*Filter Bags for Plating Solutions	332
Filter, Dry Type	261
*Filter, Solution	179
*Finish, New Black	103
Finish to Give Color Match, New	334
Fire Cement, High Temperature	67
Flexlock Joints	446
Flux, New Brazing	178
Foundry Equipment	25
*Ful-Vue Style, New Goggle	449
*Furnace Cuts Heat Treating Cost 50%, Electric ..	68
*Furnace, Laboratory	69
*Furnaces, Continuous Controlled Atmosphere ..	24
Furnaces, New Automatic Control on Detroit Rocking ..	448

G

Galvanized Iron, Lithoform for	409
*Goggle Ful-Vue Style, New	449
*Goggle, New Chipping	408
Grains, New Abrasive	24
*Grinder, Bench	180
*Grinder Drive, New Roll	180
*Grinder, New 12"	448
Grinders and Buffers, Line of	144
Grit, Steel	261

H

"H"—a Magnesium Sand Casting Alloy, Dowmetal ..	446
*Handiplater, The Udylite	298
Hard Non-Corrosive Castings	221
*Heat Treating Cost 50%, Electric Furnace Cuts ..	68
*High Speed Die Casting Machine, Hydraulic ..	223
High Temperature Fire Cement	67
*Horizontal Edgewise Pyrometer	260
Hot Zinc Process	179
*Humidified Buffs, New Line of	406
*Hydraulic High Speed Die Casting Machine ..	223

I

Impervious Films, Coatings of	408
*Improved Drive for Control-Pyrometer ..	332
*Improved Insulating Refractory Concrete ..	407
*Improved Rubber Tank Lining	25
Improved Stop-Off Lacquer for Chromium Plating ..	334
Industrial Alkali, New	104
Industrial Alkali, New	145
Industrial Tractor	28
Industries to Feature Oakite Booth, Parade of ..	332

Installation, X-Ray	446
*Insulating Refractory Concrete, Improved ..	407
Iron, Lithoform for Galvanized	409

J

Jewelry Manufacture, Chemicals for	449
Joints, Flexlock	446
Joints, Rubber	103

K

Korolac Exhibit	334
Kote-Rax Covering	298

L

*Laboratory Balance, New	333
*Laboratory Furnace	69
*Laboratory, Polishing Research	297
*Laboratory Stirrer, New	369
Lacquer for Chromium Plating, Improved Stop-Off ..	334
*Lathe, New Rite Speed	27
*Lathe, Standard Extra Wide Swing Polishing and Buffing ..	297
*Lathes, Automobile Fender Polishing	407
Line of Grinders and Buffers	144
*Line of Humidified Buffs, New	406
*Lining, Improved Rubber Tank	25
Lithoform for Galvanized Iron	409

M

MacDermid Cleaners	261
*Machine, Centrifugal Blast Cleaning	68
*Machine, Colt Autosan Metal Parts Washing ..	406
*Machine, Hydraulic High Speed Die Casting ..	223
*Machine, New Die Casting	24
*Machine, New Spray	180
*Machines, Die Casting	144
*Machine, Swinging Arm Spray Coating ..	447
Magnesium Sand Casting Alloy, Dowmetal "H"—a ..	446
*Magnus Exhibit in Paris	297
*Mark of Quality on Electroplate, The ..	296
Match, New Finish to Give Color	334
*Mercuric Type Burnishing Barrel	298
*Metal Baling Press, Scrap	180
Metal, New Type Monel	104
*Metal Parts Washing Machine, Colt Autosan ..	406
Metal Products Exhibit Opens September 1 ..	298
Metallic Coatings	334
Metalsilicate Cleaner, New	405
*Microscope, Electroplaters'	368
*Mill, New Blast	27
Monel Metal, New Type	104

N

*Nickel as a Bearing Alloy, Cadmium	142
Nickel Process, New Bright	25
Non-Corrosive Castings, Hard	221
Non-Crystalline Copper	144
Non-Ferrous Alloy, New	260

O

Oakite Booth, Palace of Industries to Feature ..	332
--	-----

P

Palladium Plating Solution, New	369
Pallets, Core Plates and	368
Parade of Industries to Feature Oakite Booth ..	332
*Paris, Magnus Exhibit in	297
*Paste, Self-Fluxing Solder	28
*Patented, Ball Anode	26
*Patterns in Strip Steel, Stripes and ..	449
Pickling Process Uses Alternating Current ..	369
*Plated Parts, Fast Drying for	298
Plates and Pallets, Core	368
*Plating Barrel, Udylite	103
Plating, Improved Stop-Off Lacquer for Chromium ..	334
*Plating Printing Rollers, The Ballard Process of Copper ..	143
*Plating Rack Coating	179
Plating Solutions, New Palladium	369
Plating Solution, White	370
*Plating Solutions, Filter Bags for	332
*Polishing and Buffing Lathe, Standard Extra Wide Swing ..	297
*Polishing Lathes, Automobile Fender	407
*Polishing Research Laboratory	297
*Polishing Wheel, New	408
*Polishing Wire Rods, Straightening and ..	222
Portable Pyrometer, New	67
*Press, Scrap Metal Baling	180
*Printing Rollers, The Ballard Process of Copper Plating ..	143
Process, Cromodizing a New Rustproofing ..	408
Process, Hot Zinc	179
Process, New Bright Nickel	25
*Process of Copper Plating Printing Rollers, The Ballard ..	143
Process Uses Alternating Current, Pickling ..	369
Products Exhibit Opens September 1, Metal ..	298
*Pump for Corrosives	448
*Pump, New Type Centrifugal	67
*Pyrometer for Taking Surface Temperatures of Revolving Rolls ..	25
*Pyrometer, Horizontal Edgewise	260
*Pyrometer, New Portable	67
*Pyrometers, Surface	68

Q

*Quality on Electroplate, The Mark of	296
*Quick Repair Rivet and Seal	144

R

*Rack Coating, Plating	179
Rax, Covering, Kote	298
*Refractory Concrete, Improved Insulating ..	407
*Research Laboratory, Polishing	297
*Respirator, New	25
Respirator, New	67
*Rheostat, Udylite	27
*Rite Speed Lathe, New	27
*Rivet and Seal, Quick Repair	144
Rocking Furnaces, New Automatic Control on Detroit ..	448
*Rods, Straightening and Polishing Wire ..	222
*Roll Grinder Drive, New	180
*Rollers, The Ballard Process of Copper Plating ..	143
Rubber Joints	103
*Rubber Tank Lining, Improved	25
Rubberizing, New Developments in ..	297
Rustproofing Process, Cromodizing a New ..	408

S

*Sand Blast Cabinets	26
Sand Casting Alloy, Dowmetal "H"—a Magnesium ..	446
*Sand Conditioner	28
*Scrap Metal Baling Press	180
Screen, Vibratory	261
*Seal, Quick Repair Rivet and	144
*Self-Fluxing Solder Paste	28
Service, Design	145
*Set, Analytical	261
Sodium Zinc Alloy	178
Solder, New Aluminum	144
*Solder Paste, Self-Fluxing	28
*Solution Filter	179
Solution, New Palladium Plating	369
Solution, White Plating	370
*Spot Welders, New	333
*Spray Coating Machine, Swinging Arm ..	447
*Spray Machine, New	180
*Standard Extra Wide Swing Polishing and Buffing Lathe ..	297
Steel Grit	261
*Steel, Stripes and Patterns in Strip ..	449
*Stirrer, New Laboratory	369
Stop-Off Lacquer for Chromium Plating, Improved ..	334
*Straightening and Polishing Wire Rods ..	222
*Stripes and Patterns in Strip Steel ..	449
*Strip Steel, Stripes and Patterns in ..	449
*Surface Pyrometers	68
*Surface Temperatures of Revolving Rolls ..	447
*Swinging Arm Spray Coating Machine ..	447
*Pyrometer for Taking Surface Temperatures of Revolving Rolls ..	25
*Swing Polishing and Buffing Lathe, Standard Extra ..	297

T

*Tank Lining, Improved Rubber	25
*Temperatures of Revolving Rolls, Pyrometer for Taking Surface ..	25
*Tester for Zinc and Cadmium Deposits, Thickness ..	221
*Thickness Tester for Zinc and Cadmium Deposits ..	221
Tractor, Industrial	28
*Triple Action Cutting Barrel	179
Tungsten with Related Elements, Electrodeposition of ..	447
*12" Grinder, New	448

U

Udylite Handiplater, The	298
*Udylite Plating Barrel, The	103
*Udylite Rheostat	27
Units, Control	178

V

*Ventilated Buff, Airway	404
Vibratory Screen	261

W

Washer, Continuous	26
*Washing Machine, Colt Autosan Metal Parts ..	406
*Welders, New Spot	333
Wet Abrasive Cutter	181
*Wheel, New Polishing	408
White Plating Solution	370
*Wire Rods, Straightening and Polishing ..	222

X

*X-Ray Equipment, New	370
X-Ray Installation	446

Z

Zam Anodes	178
Zinc Alloy, Sodium	178
*Zinc and Cadmium Deposits, Thickness Tester for ..	221
*Zinc, Ball Anodes for Copper, Brass and ..	407
Zinc Process, Hot	179

EQUIPMENT FIRMS

A

Acme Steel Company, 2836 Archer Avenue, Chicago, Ill., *Stripes and Patterns in Strip Steel 449
 Alrose Chemical Company, 80 Clifford Street, Providence, R. I., *New Black Finish 103
 Aluminumix Solder Company, 50 Cliff Street, New York, New Aluminum Solder 144
 American Chemical Paint Company, Ambler, Pa., Cromodizing a New Rustproofing Process 408
 American Chemical Paint Company, Ambler, Pa., Lithoform for Galvanized Iron 409
 American Hard Rubber Company, 11 Mercer St., New York, *Improved Rubber Tank Lining 25
 American Hard Rubber Company, 11 Mercer St., New York, *New Type Centrifugal Pump 67
 American Optical Company, Southbridge, Mass., *New Goggle Ful-Vue Style 449
 American Smelting and Refining Company, Maurer, N. J., *Cadmium Nickel as a Bearing Alloy 142
 American Solder and Flux Company, Wayne Avenue and Berkley Street, Philadelphia, Pa., Metallic Coatings 334
 American Steel Abrasives Company, Galion, Ohio, Steel Grit 261

B

Baldor Electric Company, 4351 Duncan Ave., St. Louis, Mo., Ball Bearing Buffers 222
 Baldor Electric Company, 4351 Duncan Avenue, St. Louis, Mo., *New 12" Grinder 448
 Bardone-Giovannucci, 113 West Avenue, Stamford, Conn., Design Service 145
 Baynes and Son, John R., Canterbury, Conn., Etching Methods 260
 Belke Manufacturing Company, Chicago, Ill., New Burnishing Barrel 405

C

Campbell Division, Andrew C., American Chain Company, Inc., Bridgeport, Conn., *Wet Abrasive Cutter 181
 Campbell-Hausfeld Company, Harrison, Ohio, *Laboratory Furnace 69
 Carborundum Company, Niagara Falls, N. Y., *New Polishing Wheel 408
 Chemical Polishing Company, 175 5th Avenue, N. Y., *New Laboratory Balance 333
 Chemical Publishing Company, 175 5th Avenue, New York, *New Laboratory Stirrer 369
 Chicago Eye Shield Company, 2298 Warren Blvd., Chicago, Ill., *New Chipping Goggle 408
 Chicago Eye Shield Company, Chicago, Ill., *New Respirator 25
 Chicago Eye Shield Company, Chicago, Ill., New Respirator 67
 Clark Tractor Company, Battle Creek, Mich., Industrial Tractor 28
 Colt's Patent Fire Arms Mfg. Company, Inc., Hartford, Conn., *Colt Autosan Metal Parts Washing Machine 406
 Coppus Engineering Corporation, Worcester, Mass., Dry Type Filter 261

D

Detroit Electric Furnace Company, Detroit, Mich., New Automatic Control on Detroit Rocking Furnaces 448
 DeVilbiss Company, Toledo, Ohio, *Atomizer for Burns 223
 DeVilbiss Company, Toledo, Ohio, *Swinging Arm Spray Coating Machine 447
 Doehler Die Casting Company, Toledo, Ohio, Brass Die Casting Alloy 370
 Dow Chemical Company, Midland, Mich., Dowmetal "H"—a Magnesium Sand Casting Alloy 446
 Duriron Company, Inc., Dayton, Ohio, *Pump for Corrosives 448

E

Eagle Picher Lead Company, Temple Bar Bldg., Cincinnati, Ohio, *Self-Fluxing Solder Paste 28

F

Farrel Birmingham Company, Ansonia, Conn., *New Roll Grinder Drive 180
 Ferro Enamel Corporation, Cleveland, Ohio, Pickling Process Uses Alternating Current 369
 Foxboro Company, Foxboro, Mass., *Improved Drive for Control-Pyrometer 332

G

Gallimore & Sons, Ltd., William, Sheffield, England, New Non-Ferrous Alloy 260
 General Abrasive Company, Niagara Falls, N. Y., New Abrasive Grains 24
 Goodrich Company, B. F., Akron, Ohio, Korolac Exhibit 334
 Goodrich Company, B. F., Akron, Ohio, *Plating Rack Coating 179
 Grasselli Chemical Company, Cleveland, Ohio, Sodium Zinc Alloy 178

H

Hammond Machinery Builders, Inc., Kalamazoo, Mich., *Automobile Fender Polishing Lathes 407
 Hammond Machinery Builders, Inc., Kalamazoo, Mich., *New Rite Speed Lathe 27
 Handy and Harman, 82 Fulton Street, New York, New Brazing Flux 178
 Hanson Van Winkle-Munning Company, Matawan, N. J., *Electroplaters' Microscope 368
 Hanson Van Winkle-Munning Company, Matawan, N. J., *Fast Drying for Plated Parts 298
 Hanson Van Winkle-Munning Company, Matawan, N. J., *Filter Bags for Plating Solutions 332
 Hanson Van Winkle-Munning Company, Matawan, N. J., Kote-Rax Coating 298
 Hanson Van Winkle-Munning Company, Matawan, N. J., *Mercl Type Burnishing Barrel 298
 Hanson Van Winkle-Munning Company, Matawan, N. J., Zam Anodes 178
 Hartford Steel Ball Company, Hartford, Conn., *Triple Action Cutting Barrel 179
 Hisey Wolf Machine Company, Cincinnati, Ohio, *Bench Grinder 180
 Hommel Company, O., 209 4th Avenue, Pittsburgh, Pa., *New Spray Machine 180
 Hydraulic Press Mfg. Company, Mount Gilead, Ohio, *Scrap Metal Baling Press 180

I

Illinois Testing Laboratories, Inc., Chicago, Ill., *Horizontal Edgewise Pyrometer 260
 Illinois Testing Laboratories, Inc., Chicago, Ill., *Pyrometer for Taking Surface Temperatures of Revolving Rolls 25
 International Nickel Company, Bayonne, N. J., Hard Non-Corrosive Castings 221
 International Nickel Company, 67 Wall St., New York, New Type Monel Metal 104

J

Jackson Buff Corporation, 21-03 41st Avenue, Long Island City, N. Y., *The Airway Ventilated Buff 404
 Jeffrey Mfg. Company, Columbus, Ohio., *Sand Conditioner 28
 Johns-Manville, 22 East 40th Street, New York, Core Plate and Pallets 368

K

Kocour Company, Chicago, Ill., *Analytical Set 261

L

Lea Manufacturing Company, Waterbury, Conn., *Acid Ejector 333
 Lea Mfg. Company, Waterbury, Conn., Fast Cutting Compound 222
 Lea Manufacturing Company, Waterbury, Conn., *Polishing Research Laboratory 297
 Lester Engineering Company, 278 Rockefeller Bldg., Cleveland, Ohio, *Hydraulic High Speed Die Casting Machine 223

M

MacDermid, Inc., Waterbury, Conn., MacDermid Cleaners 261
 Madison-Kipp Corporation, Madison, Wis., *New Die Casting Machine 24
 Magnus Chemical Company, Garwood, N. J., *Magnus Exhibit in Paris 297
 Maus and Winn, J. M. J., 35 New Broad Street, London, E. C. 2, England, Hot Zinc Process 179
 Multi-Seal Mfg. Company, 7755 Sheridan Rd., Chicago, Ill., *Quick Repair Rivet and Seal 144

N

Newman Brothers, Inc., 416 Elm Street, Cincinnati, Ohio, Foundry Equipment 25
 Newton-New Haven Company, New Haven, Conn., *Die Casting Machines 144
 Nichols Copper Company, 230 N. Michigan Ave., Chicago, Ill., Non-Crystalline Copper 144

O

Oakite Products, Inc., 22 Thames Street, N. Y., Parade of Industries to Feature Oakite Booth 332

P

Packer Machine Company, Meriden, Conn., *Buffing Composition Applicator 333
 Pangborn Corporation, Hagerstown, Md., *Centrifugal Blast Cleaning Machine 68
 Pearson, Peppard and Company, Inc., 68 Beaver Street, New York, High Temperature Fire Cement 67
 Philadelphia Quartz Company, Philadelphia, Pa., New Industrial Alkali 104
 Philadelphia Quartz Company, Philadelphia, Pa., New Industrial Alkali 145
 Philadelphia Quartz Company, Philadelphia, Pa., New Metasilicate Cleaner 405
 Pier Equipment Manufacturing Company, 1310 Milton Street, Benton Harbor, Mich., *New Spot Welders 333

Pitkin, Inc., Lucius, 47 Fulton Street, New York, *The Mark of Quality on Electroplate 296
 Plating Products Company, 352 Mulberry Street, Newark, N. J., *Thickness Tester for Zinc and Cadmium Deposits 221
 Porcelain Enamel and Manufacturing Company, Baltimore, Md., New Finish to Give Color Match 334
 Pre-Metals, Inc., 120 Wall Street, New York, New Palladium Plating Solution 369
 Pyrometer Instrument Company, New York, *Surface Pyrometers 68

Q

Quigley Company, Inc., 56 W. 45th Street, New York, *Improved Insulating Refractory Concrete 407

R

R & H Chemicals Dept., E. I. duPont de Nemours & Company, Wilmington, Del., Sodium Zinc Alloy 178
 Ransohoff, Inc., N., Cincinnati, Ohio, *Continuous Washer 26
 Rockwell Company, W. S., 50 Church St., New York, *Continuous Controlled Atmosphere Furnaces 24
 Ruemelin Mfg. Company, Milwaukee, Wis., *Sand Blast Cabinets 26
 Russel Electric Company, 342 W. Huron Street, Chicago, Ill., *New Portable Pyrometer 67

S

Schumag, Aachen, Germany, *Straightening and Polishing Wire Rods 222
 Schuyler, W. A., Fisk Bldg., New York, *Straightening and Polishing Wire Rods 222
 Self Vulcanizing Rubber Company, Inc., 605 W. Washington Boulevard, Chicago, Ill., New Developments in Rubberizing 297
 Skilsaw, Inc., 3310 Elston Avenue, Chicago, Ill., Line of Grinders and Buffers 144
 Sly Mfg. Company, W. W., Cleveland, Ohio, New Blast Mill 27
 Sparhawk Company, Sparkill, N. Y., New Coating 449
 Special Chemicals Corporation, 30 Irving Place, New York, White Plating Solution 370
 Standard Electrical Tool Company, 1928 W. 8th Street, Cincinnati, Ohio, *Standard Extra Wide Swing Polishing and Buffing Lathes 297
 Standard Process Company, Chicago, Ill., *The Ballard Process of Copper Plating Printing Rollers 143
 Sterling Manufacturing Company, 43 Hospital Street, Providence, R. I., *Solution Filter 179
 St. John X-Ray Service, Inc., 30-20 Thomson Avenue, L. I. City, N. Y., *New X-Ray Equipment 370
 St. John X-Ray Service, Inc., 30-20 Thomson Avenue, Long Island City, N. Y., X-Ray Installation 446

T

Tagro Chemical Company, Inc., 108 Fulton Street, New York, Control Units 178
 Technical Coatings, Inc., 11 Park Pl., New York, Coatings of Impervious Films 408
 Tungsten Electrodeposit Corporation, Barr Building, Washington, D. C., Electrodeposition of Tungsten with Related Elements 447

U

Udylite Company, Detroit, Mich., *Ball Anode Patented 26
 Udylite Company, Detroit, Mich., *Ball Anodes for Copper, Brass and Zinc 407
 Udylite Company, Detroit, Mich., *New Line of Humidified Buffs 406
 Udylite Company, The, 1651 E. Grand Boulevard, Detroit, Mich., *The Udylite Handiplater 298
 Udylite Company, Detroit, Mich., *The Udylite Plating Barrel 103
 Udylite Company Detroit, Mich., *The Udylite Rheostat 27
 United Chromium, Inc., 51 E. 42nd St., N. Y., Research Laboratories, Improved Stop-off Lacquer for Chromium Plating 334
 United States Stoneware Company, Akron, O., Rubber Joints 103
 United States Stoneware Company, 50 Church Street, New York, Flexlock Joints 446
 U. S. Galvanizing & Plating Equipment Corp., Brooklyn, N. Y., New Bright Nickel Process 25
 U. S. Stoneware Company, Akron, Ohio, Acid Proof Cements 261

W

Ward, Arthur T., 50 Church Street, New York, Vibratory Screen 261
 Weisberg Laboratories, Mark, Providence, R. I., Chemicals for Jewelry Manufacture 449
 Wolverine Tube Company, Detroit, Mich., *Electric Furnace Cuts Heat-Treating 50% 68

